



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,889	02/04/2004	Dean J. Richtsmeier	200313857-1	5369
22879 7590 09/12/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER KAPLAN, HAL IRA	
			ART UNIT 2836	PAPER NUMBER
			MAIL DATE 09/12/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/772,889

Applicant(s)

RICHTSMEIER ET AL.

Examiner

Hal I. Kaplan

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 and 38-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 and 38-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The indicated allowability of claims 17, 21-24, 29, 35, and 40 is withdrawn in view of the newly discovered reference(s) to Chu. Rejections based on the newly cited reference(s) follow.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2836

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 2, 5-10, 14-16, 18, 20-28, 30, 31, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over the US patent of Chu (6,774,509) in view of the US patent of Bartok (6,459,060).

As to claims 1, 22, and 25, Chu discloses an electronic device comprising a face (12); a switch (110) configured such that successive actuations of the switch (110) actuates the device between a first state (on) and a second state (off); and a switch actuation mechanism (142,143) configured to actuate against a point of contact (111) of the switch a first time in response to a first manual input along the face (12) to actuate the device to the first state (on) and to actuate against the same point of contact of the switch a second time in response to a second manual input along the face (12) to actuate the device to the second state (off) (see column 4, lines 16-18 and 35-48; column 5, lines 39-49; and Figures 1 and 2). Chu does not disclose the two inputs having a characteristic, other than time at which they are performed, distinct from each other.

Bartok discloses an electric device comprising a face (see Figure 3); a switch (138,112,120,122) configured such that successive actuations of the switch actuates the device between a first state and a second state; and a switch actuation mechanism (108,124), wherein the second input has at least one characteristic (entered in a different location), other than time at which it is performed, distinct from the first input (see column 3, lines 1-53; column 3, line 64 - column 4, line 3; column 4, lines 58-67;

Art Unit: 2836

column 5, line 66 - column 6, line 10; and Figures 3 and 5). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a single point of contact with a two-surface switch face like that of Bartok, because a single-point-of-contact construction is simpler than a two-point-of-contact construction.

As to claim 2, a function is performed when the device of Chu is in a first state (on) and discontinued when the device is in a second state (off) (see column 4, lines 23-26).

As to claim 5, the switch actuation mechanism (108) of Bartok includes a first movable surface and a second movable surface (protrusions - see column 3, lines 50-53 and Figure 3) and the first input includes moving the first movable surface and the second input includes moving the second movable surface.

As to claims 6 and 7, the movable surfaces of Bartok are depressible (see column 3, lines 50-53 and Figure 3).

As to claim 8, the first surface and the second surface of Bartok are spaced from one another along the face (see Figure 3).

As to claims 9 and 10, the movable surfaces of Bartok have different indicia (shape and texture) (see Figure 3).

As to claims 14 and 16, Chu discloses an extension (142) coupled to the button (141) and linearly movable relative to the switch (110) (see column 5, lines 39-49).

As to claim 15, Chu discloses a guide (145) guiding linear movement of the extension (142) relative to the switch (110) (see column 5, lines 39-49).

As to claims 18, 28, and 30, the actuation mechanism (108,124) of Bartok includes an actuation member (108) pivotally supported along the face (110), wherein the first input includes pivoting the actuation member (108) in a first direction and wherein the second input includes pivoting the actuation member (108) in a second direction (see column 3, lines 45-53).

As to claims 20, 23, and 31, the first and second inputs of Bartok are parallel to each other (although the rocker rotates, the movable surfaces are pressed straight down and are thus parallel to each other) (see Figures 3 and 4).

As to claims 21 and 24, the on and off inputs of Chu are identical, other than the time at which they are performed (see column 4, lines 23-26 and 35-48 and Figure 2).

As to claims 26 and 27, Chu discloses the step of applying an input including depressing an actuation member (144) operably coupled to the switch (see column 5, lines 43-49 and Figure 2).

As to claim 40, Chu discloses a resilient depressible actuator (142-145), wherein a same portion of the actuator is depressed in response to both the first input and the second input (see column 4, lines 23-26 and 35-48; column 5, lines 39-49; and Figure 2).

6. Claims 3, 4, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Bartok as applied to claims 1 and 2 above, and further in view of the US patent of Downing et al. (6,075,925).

As to claim 3, Chu in view of Bartok disclose all of the claimed features, as set

forth above, except for the claimed print medium. Downing, drawn to a control panel for image forming devices, discloses an image forming device wherein printing upon a print medium is performed when the device is in a first state and discontinued when the device is in a second state (see column 3, lines 32-36 and column 5, lines 20-24). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the switching device of Chu in view of Bartok in the image forming device of Downing, because the switching device of Bartok insures a reliable return of the contact to a neutral off position (see Bartok, column 2, lines 26-32).

As to claim 4, the switch actuation mechanism (108) of Bartok includes a first movable surface and a second movable surface (protrusions - see column 3, lines 50-53 and Figure 3) and the first input includes moving the first movable surface and the second input includes moving the second movable surface.

As to claim 19, neither Chu nor Bartok nor Downing specifically disclose an imaging material dispensing device. However, Downing discloses a laser printer (100), and it is inherent that a laser printer comprises an imaging material dispensing device (toner cartridge). Downing also discloses a controller (20) coupled to a switch (15), wherein the dispensing device dispenses imaging material and discontinues dispensing imaging material in response to the control signals (see column 5, lines 42-45).

7. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Bartok as applied to claim 5 above, and further in view of the US patent of Parks et al. (5,877,746).

As to claims 9-13, Chu in view of Bartok disclose all of the claimed features, as

Art Unit: 2836

set forth above, except for the first movable surface and the second movable surface having distinct indicia. Parks, drawn to a user interface for all-in-one integrated office system, discloses two buttons (22,23) with distinct indicia (Start,Stop), wherein the Start button is green and the Stop button is red (see column 13, lines 6-18). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the device of Chu in view of Bartok with green and red start and stop buttons, as taught by Parks, so that a novice user can determine which button to press to perform a given function and be able to stop the device in an emergency. In addition, the selection of green and red as the colors is a design decision based upon the device's intended use and not a patentable distinction. See MPEP §2144.04.

8. Claims 17, 29, 35, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Bartok, as applied to claims 1, 28, and 32 above, and further in view of the US patent of Feaster (4,191,867).

As to claims 17, 29, 35, and 41, Chu in view of Bartok disclose all of the claimed features, as set forth above, except for an actuation member slidable along the face. Feaster discloses a switch comprising an actuation member (209) slidable along the face (207) of the switch, wherein a first input includes sliding the actuation member in a first direction (to the right) and a second input includes sliding the actuation member in a second direction (to the left) along a substantially common plane (see column 5, lines 10-15 and Figure 11). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have constructed the switch of Chu in view of Bartok with a slidable actuation member instead of a button or rocker, because people who may be

unable to push a button due to a physical disability can often easily slide a slidable actuation member and will thus be able to easily use the switch.

9. Claims 32-34, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Bartok, and further in view of the US patent of Mori et al. (6,337,961).

As to claims 32-34, 36, and 38, Chu in view of Bartok disclose all of the claimed features, as set forth above, except for an image forming engine. Chu discloses a post (142) operably coupled to the switch to apply an actuating force to the switch, wherein the movement of the input surface (141) linearly moves the post (142) along an axis against the switch to actuate the switch to the first state or the second state (see column 5, lines 39-49 and Figure 2). Mori, drawn to a print control method and apparatus, and printer, discloses an image forming engine (17) actuatable between a first state and a second state (see column 4, lines 49-56). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the switch of Chu in view of Bartok in a printer with an image forming engine, because it would be easier for the user to determine that the switch has been toggled and the device is working properly.

10. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chu in view of Bartok and Mori, as applied to claim 32 above, and further in view of Parks.

As to claim 39, Chu in view of Bartok and Mori disclose all of the claimed features, as set forth above, except for the distinct associated indicia. Parks discloses two buttons (22,23) with distinct indicia (Start,Stop), wherein the Start button is green and the Stop button is red (see column 13, lines 6-18). It would have been obvious to

Art Unit: 2836

one of ordinary skill in the art, at the time of the invention, to have used green and red start and stop buttons of the device of Chu in view of Bartok and Mori, so that a novice user can determine which button to press to perform a given function.

### ***Response to Arguments***

11. Applicant's arguments, see Remarks, filed June 7, 2007, with respect to the objections to claims 21 and 24 have been fully considered and are persuasive. The objections to claims 21 and 24 have been withdrawn.

12. Applicant's arguments with respect to claims 1-13, 18, 19, 25-28, 30-34, 36, 38, and 39 have been considered but are moot in view of the new ground(s) of rejection.

13. With respect to claims 14-16 and 20, the Examiner did not reject any claims over nor cite a "Bob" reference. For examination purposes, it has been assumed that this is a typographical error and that the Applicant was referring to the US patent of Heydner (5,558,211). The rejection of claims 14-16 and 20 under Bartok and Heydner is moot in view of the new ground(s) of rejection.

### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 2836

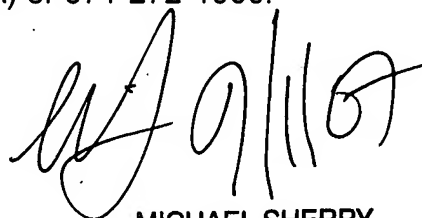
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hik

A handwritten signature in black ink, appearing to read 'MS 9/11/07', is written over the printed name and title of Michael Sherry.

MICHAEL SHERRY  
SUPERVISORY PATENT EXAMINER